



FORM PTO-1581 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER <b>09/830663</b> 4121-123
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (if known, see 37 CFR 1.51) <b>09/830,663</b>
INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/DE99/03517	29 October 1999	28 October 1998
TITLE OF INVENTION		
ANTIBODIES BINDING TO THE AAV CAPSID, ANTIBODIES MODIFYING CYTOTROPISM, METHOD FOR TARGETED GENE TRANSFER		
APPLICANT(S) FOR DO/EO/US		
Jürgen KLEINSCHMIDT, Christiane WOBUS and Andrea KERN		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371. 3. <input type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11. to 16. below concern other document(s) or information included: 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input checked="" type="checkbox"/> Small entity status hereby is claimed. 16. <input checked="" type="checkbox"/> Other items or information: sequence listing and sequence disk, together with statement of identity		

17. <input checked="" type="checkbox"/> The following fees are submitted:				CALCULATIONS		PTO USE ONLY	
<b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b> Search Report has been prepared by the EPO or JPO .....\$860.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) .....\$0.00 No International preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) .....\$0.00  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO .....\$1000.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) .....\$0.00							
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				\$	860.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$			
Claims	Number Filed	Number Extra	Rate				
Total Claims	12-20 =	0	X \$18.00	\$			
Independent Claims	1-3 =	0	X \$80.00	\$			
Multiple dependent claim(s) (if applicable)			+ \$270.00	\$	270.00		
<b>TOTAL OF ABOVE CALCULATIONS =</b>					1130.00		
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).				\$	565.00		
<b>SUBTOTAL =</b>				\$	565.00		
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$			
<b>TOTAL NATIONAL FEE =</b>				\$	565.00		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$			
<b>TOTAL FEE ENCLOSED =</b>				\$	490.00		
				<b>Amount to be:</b>			
				<b>refunded</b>		\$	
				<b>Charged</b>		\$	
a. <input checked="" type="checkbox"/> A check in the amount of \$490.00 to cover the above fees is enclosed. (IPTL check no. 08057)  b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. 08-3284 in the amount of \$75.00 to cover the above fees. A duplicate copy of this sheet is enclosed.  c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 08-3284. A duplicate copy of this sheet is enclosed.							
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not yet been met, a petition to revive (37 CFR 1.127(a) or (b)) must be filed and granted to restore the application to pending status.</b>							
<b>SEND ALL CORRESPONDENCE TO:</b>  Steven J. Hultquist Intellectual Property/Technology Law P. O. Box 14329 Research Triangle Park, NC 27709							
<div style="text-align: right;">             STEVEN J. HULTQUIST            Registration No. 28,021         </div>							

Please type a plus sign (+) inside the circle 

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09/830663  
26 APR 2001

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b>  (Only for new nonprovisional applications under 37 CFR 1.53(b))	<b>Attorney Docket No.</b>	4121-123
	<b>First Inventor</b>	KLEINSCHMIDT, et al.
	<b>Title</b>	ANTIBODIES BINDING TO THE AAV CAPSID, ANTIBODIES MODIFYING CYTOTROPISM, METHOD FOR TARGETED GENE TRANSFER
	<b>Express Mail Label No.</b>	EL647805308US

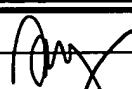
<b>APPLICATION ELEMENTS</b> <i>See MPEP chapter 600 concerning utility patent application contents.</i>	<b>ADDRESS TO:</b> Commissioner for Patents Box Patent Application Washington, DC 20231
<p>1. <input checked="" type="checkbox"/> <b>Fee Transmittal Form (e.g., PTO/SB/17)</b> (Submit an original and a duplicate for fee processing)</p> <p>2. <input checked="" type="checkbox"/> <b>Applicant claims small entity status.</b> See 37 CFR 1.27.</p> <p>3. <input checked="" type="checkbox"/> <b>Specification</b> [Total Pages <b>19</b> ] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R &amp; D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure</p> <p>4. <input checked="" type="checkbox"/> <b>Drawing(s) (35 U.S.C. 113)</b> [Total Sheets <b>3</b> ]</p> <p>5. <b>Oath or Declaration</b> [Total Sheets <b>1</b> ] a. <input type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 18 completed) i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</p> <p>6. <input type="checkbox"/> <b>Application Data Sheet.</b> See 37 CFR 1.76</p> <p>7. <input type="checkbox"/> <b>CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</b></p> <p>8. <b>Nucleotide and/or Amino Acid Sequence Submission</b> (if applicable, all necessary) a. <input checked="" type="checkbox"/> <b>Computer Readable Form (CRF)</b> b. <b>Specification Sequence Listing on:</b> i. <input type="checkbox"/> <b>CD-ROM or CD-R (2 copies); or</b> ii. <input checked="" type="checkbox"/> <b>paper</b> c. <input checked="" type="checkbox"/> <b>Statements verifying identity of above copies</b></p>	
<b>ACCOMPANYING APPLICATION PARTS</b>	
<p>9. <input type="checkbox"/> <b>Assignment Papers (cover sheet &amp; document(s))</b></p> <p>10. <input type="checkbox"/> <b>37 CFR 3.73(b) Statement</b> <input type="checkbox"/> <b>Power of Attorney</b> (when there is an assignee)</p> <p>11. <input checked="" type="checkbox"/> <b>English Translation Document (if applicable)</b></p> <p>12. <input type="checkbox"/> <b>Information Disclosure Statement (IDS)/PTO-1449</b> <input type="checkbox"/> <b>Copies of IDS Citations</b></p> <p>13. <input type="checkbox"/> <b>Preliminary Amendment</b></p> <p>14. <input checked="" type="checkbox"/> <b>Return Receipt Postcard (MPEP 503)</b> (Should be specifically itemized)</p> <p>15. <input type="checkbox"/> <b>Certified Copy of Priority Document(s)</b> (if foreign priority is claimed)</p> <p>16. <input type="checkbox"/> <b>Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i).</b> Applicant must attach form PTO/SB/35 or its equivalent.</p> <p>17. <input type="checkbox"/> <b>Other:</b> .....</p>	

18 If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_  
Prior application information: Examiner: \_\_\_\_\_ Group Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

<b>19. CORRESPONDENCE ADDRESS</b>					
<input type="checkbox"/> <b>Customer Number or Bar Code Label</b>		<input type="checkbox"/> <b>Correspondence address below</b>			
(Insert Customer No. or Attach bar code label here)					
<b>Name</b>	Steven J. Hultquist				
<b>Address</b>	P.O. Box 14329				
<b>City</b>	Research Triangle Park	<b>State</b>	NC	<b>Zip Code</b>	27709
<b>Country</b>	USA	<b>Telephone</b>	(919) 419-9350	<b>Fax</b>	(919) 419-9354

<b>Name (Print/type)</b>	Steven J. Hultquist	<b>Registration No. (Attorney/Agent)</b>	28021
<b>Signature</b>		<b>Date</b>	April 26, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

09/830663

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26 APR 2001

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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# FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$ 490.00)

## Complete if Known

Application Number

Filing Date

First Named Inventor

KLEINSCHMIDT, et al.

Examiner Name

Group Art Unit

Attorney Docket No.

4121-123

## METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:Deposit  
Account  
Number  
Deposit  
Account  
Name

08-3284

Intellectual Property/Technology Law

☒Charge Any Additional Fee Required  
Under 37 CFR 1.16 and 1.17☒Applicant claims small entity status.  
See 37 CFR 1.272. ☐

Payment Enclosed:

☒

Check

☐ Credit Card☐ Money  
Order☐ Other

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	355.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

SUBTOTAL (1) (\$ 355.00)

## 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from Below	Fee Paid
12	-20**= 0	x 0	= 0
1	-3**= 0	x 0	= 0
Multiple Dependent		135	= 135

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 135.00)

\*\* or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 0.00)

## SUBMITTED BY

## Complete (if applicable)

Name (Print/Type)

Steven J. Hultquist

Registration No.  
(Attorney/Agent)

28021

Telephone

(919) 419-9350

Signature

Date

April 26, 2001

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

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26 APR 2001

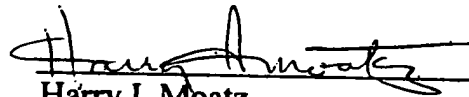
**BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE  
UNITED STATES PATENT AND TRADEMARK OFFICE**

**LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)**

Yongzhi Yang is hereby given limited recognition under 37 CFR § 10.9(b) as a student trainee at Intellectual Property Technology Law ("IPTL") to prepare and prosecute patent applications in the United States Patent and Trademark Office wherein the applicant is a client of IPTL and the attorney or agent of record in the application is an employee of IPTL. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Yongzhi Yang ceases to lawfully reside in the United States, (ii) Yongzhi Yang's training at IPTL ceases or is terminated, or (iii) Yongzhi Yang ceases to remain or reside in the United States on an F-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the United States Patent and Trademark Office.

**Expires: June 30, 2001**

  
Harry I. Moatz

Director of Enrollment and Discipline

04/26/01  
JCS53 U.S. PRO

024-27-01  
JC07 Rec'd PCT/PTO 26 APR 2001  
09/830663  
PATENT APPLICATION  
\$  
Baker

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re United States Patent Application of:

**Applicant:** Kleinschmidt, et al.

**Serial No.:** New U.S. National Stage Application of  
International Application No.  
PCT/DE99/03517

**Date Filed:** April 26, 2001

**International  
Filing Date:** October 29, 2000

**Priority Date  
Claimed:** German Patent Application No. 198 49  
643.5 (October 28, 1998)

**Title:** ANTIBODIES BINDING TO THE AAV  
CAPSID, ANTIBODIES MODIFYING  
CYTOTROPISM, METHOD FOR  
TARGETED GENE TRANSFER

**Atty. Docket No.:** 4121-123

**Examiner:** Not Yet  
Assigned

**Group Art Unit:** Not Yet  
Assigned

**Paper No.:** 1



**23448**

PATENT TRADEMARK OFFICE

**EXPRESS MAIL CERTIFICATE**

It hereby is certified by the person identified below that the attached documents are being mailed to the Commissioner of Patents on the date specified, in an envelope addressed to the Assistant Commissioner of Patents, Box PATENT APPLICATION, Washington, DC 20231, and Express Mailed under the provisions of 37CFR 1.10.

Blake Crouch

April 26, 2001  
Date of Mailing

EL647805308US  
Express Mail Label Number

**SUBMISSION UNDER 37 CFR 1.53 AND 35 U.S.C. 371 OF UNITED STATES PATENT  
APPLICATION (NATIONAL PHASE PROCEEDINGS) BASED ON INTERNATIONAL  
APPLICATION NO. PCT/DE99/03571 AND CLAIMING PRIORITY OF GERMAN PATENT  
APPLICATION NO. 198 49 643.5**

Commissioner for Patents  
Box PATENT APPLICATION  
Washington, DC 20231

09/830663

JC08 Rec'd PCT/PTO 26 APR 2001

Sir:

Submitted herewith under the provisions of 37 CFR 1.53 and 35 USC 371 is a new U.S. patent application (national phase application) based on International Patent Application PCT/DE99/03571 and claiming priority to German Patent Application No. 198 49 643.5.

Respectfully submitted,



Steven J. Hultquist  
Reg. No. 28,021  
Attorney for Applicants

**INTELLECTUAL PROPERTY/  
TECHNOLOGY LAW**  
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